NATIONAL ACADEMY OF SCIENCES

NATIONAL RESEARCH COUNCIL

2101 CONSTITUTION AVENUE, WASHINGTON, D. C. 20418

OFFICE OF INFORMATION

19 July 1968

Professor Joshua Lederberg Department of Genetics Stanford University School of Medicine Stanford Medical Center Palo Alto, California 94304

Dear Professor Lederberg:

I now feel somewhat closer to the subject matter of the project for the <u>Washington</u> <u>Post</u> and hope that this letter will enable you to fit the pieces into place.

As I wrote before, we intend that you write the keystone piece of the section, dealing entirely with the sweep of present and anticipated developments in human genetics as they may affect present and future societies. We shall call upon others to anticipate the nature of the probable effects, their observations to be based on your completed article.

The developments that we would like you to deal with can be divided into two sections: those that could now serve as the basis for individual or social action and those that have a reasonable degree of probability in the next few decades.

Both lists are based on discussions that have been held by a number of human geneticists, and in which you may well have participated. I claim no credit for the list. It was cribbed in its entirety from a longer list supplied by Arno Motulsky.

PRESENT POSSIBILITIES

- 1. Screening for genetic defects
- 2. Genetic counseling
- 3. Genetic probabilities of adoptive children
- 4. Genetic investigation of semen donors

- 5. Use of vital statistics to make demographic studies of genetic effects on fertility and mortality
- 6. Genetic effects of family planning
- 7. Effects of environmental mutagens
- 8. Dysgenic effects of medical practices
- 9. Use of large-scale data banks on genetic malformations
- 10. Genetic indicators for abortions
- ll. Fetal diagnosis
- 12. Relationship between chromosomal abnormalities and criminal tendencies
- 13. Genetic differentiation among races
- 14. Delayed somatic effects of viral inoculations

FUTURE POSSIBILITIES

- 1. Germinal choice
- 2. Gametic selection
- 3. In vitro fertilization
- 4. Cloning
- 5. Parthenogenesis
- 6. Fertilized egg fusion
- 7. Interspecific hybridization
- 8. Genetic surgery

It is quite apparent that there is more than enough subject matter for an article of the length the <u>Post</u> can use. I am ready to leave to you the authority to choose from among this lot those developments which you think have greatest significance, now or in the immediate future, for the individual and society. If you can add a rough timetable, so much the better.

Does this provide you with what you need? Don't hesitate to call me here at 202-961-1518. I shall be going on vacation 27 July, but will be reachable even then through my office.

Very sincerely,

Howard J. Lewis
Director
Office of Information

HJL:ca

cc: Howard Simons J.V. Reistrup